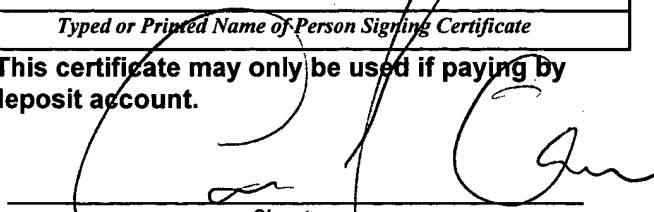


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<b>TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT</b> (Under 37 CFR 1.97(b) or 1.97(c))			Docket No. 66638/37454	
In Re Application Of: Carey A. Smith				
Serial No. 10/649,920	Filing Date 8/25/2003	Examiner To Be Assigned	Group Art Unit To Be Assigned	
Title: <b>State-Space Wavefront Reconstructor for Adaptive Optics Control</b>				
<p>Address to: Commissioner for Patents Washington, D.C. 20231</p> <p><b>37 CFR 1.97(b)</b></p> <p>1. <input checked="" type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.</p> <p style="text-align: center;"><b>37 CFR 1.97(c)</b></p> <p>2. <input type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:</p> <p style="margin-left: 40px;"><input type="checkbox"/> the statement specified in 37 CFR 1.97(e);</p> <p style="text-align: center;"><b>OR</b></p> <p style="margin-left: 40px;"><input type="checkbox"/> the fee set forth in 37 CFR 1.17(p).</p>				
<p>RECEIVED JUN 22 2004 OIPF/JCWS</p>				
<p>06-09-2004 U.S. Patent &amp; TMO/TM Mail Rcpt Dt. #72</p>				

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<b>Payment of Fee</b> (Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))				
<input type="checkbox"/> A check in the amount of _____ is attached. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge and credit Deposit Account No. <b>20-0823</b> as described below. A duplicate copy of this sheet is enclosed.				
<input type="checkbox"/> Charge the amount of \$ _____ <input checked="" type="checkbox"/> Credit any overpayment. <input checked="" type="checkbox"/> Charge any additional fee required.				
<b>Certificate of Transmission by Facsimile*</b> I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (Fax No. _____) on _____ (Date)  <div style="border-top: 1px solid black; text-align: center;">Signature</div> <div style="border-top: 1px solid black; text-align: center;">Typed or Printed Name of Person Signing Certificate</div>		<b>Certificate of Mailing by First Class Mail</b> I certify that this document and fee is being deposited on <u>June 7</u> , 2004 with the U.S. Postal Service as First Class Mail under 37 C.F.R. 1.10 and addressed to the Commissioner for Patents, Washington, D.C. 20231  <div style="border-top: 1px solid black; text-align: center;">Signature of Person Mailing Correspondence</div> <div style="border-top: 1px solid black; text-align: center;">Caroline G. Chicoine</div> <div style="border-top: 1px solid black; text-align: center;">Typed or Printed Name of Person Mailing Certificate</div>		
<p><b>*This certificate may only be used if paying by deposit account.</b></p> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="width: 45%;">   <div style="border-top: 1px solid black; text-align: center;">Signature</div> <p>Caroline G. Chicoine, Reg. No. 38,198            Thompson Coburn LLP            One US Bank Plaza            St. Louis, Missouri 63101-9928            314-552-6499            314-552-7499 FAX</p> </div> <div style="width: 45%; text-align: right;">           Dated: June 7, 2004         </div> </div>				
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

*(use as many sheets as necessary)*

**Complete if Known**

<b>Application Number</b>	10/649,920
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<b>Filing Date</b>	8/25/2003
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<b>First Named Inventor</b>	Carey A. Smith
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Art Unit	To Be Assigned
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Examiner Name	To Be Assigned
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Attorney Docket Number	66638/37454
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Sheet	1	of	2
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## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>	
			Application Number	10/649,920
			Filing Date	8/25/2003
			First Named Inventor	Carey A. Smith
			Group Art Unit	To Be Assigned
			Examiner Name	To Be Assigned
			Attorney Docket Number	6638/37454
Sheet	2		2	

## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		JOHN W. HARDY, Adaptive Optics for Astronomical Telescopes, <i>Oxford University Press</i> , 1998 (pages 31-33, and 55-69)	
		WILLIAM H PRESS, et al., Numerical Recipes in C: The Art of Scientific Computing, <i>Cambridge University Press</i> , 1992 (pages 32-36, and 59-71)	
		ARTHUR GELB, Applied Optimal Estimation, <i>The MIT Press</i> , 1974 (pages 102-112)	
		DAVID L. FRIED, Branch Point Problem in Adaptive Optics, <i>Optical Society of America</i> , 1998 (pages 2759-2768)	
		WALTER J. WILD, et al., Rapid and Robust Detection of Branch Points from Wave-Front Gradients, <i>Optical Society of America</i> , 1999 (pages 190-192)	
		GLENN A. TYLER, Adaptive Optics Compensation in Strong Scintillation: Reconstruction and Assessment of the Slope Discrepancy Phase and Its Relation to Branch Points, Fitting Error and Noise, <i>The Optical Sciences Company</i> , 2000 (pages 2-24)	
		GLENN A. TYLER, Reconstruction and Assessment of the Least-Squares and Slope Discrepancy Components of the Phase, <i>Optical Society of America</i> , 2000 (pages 1828-1839)	
		JAMES P. STONE, et al., Branch Cut Sensitive Wavefront Reconstruction for Low Elevation Viewing, <i>AMOS Seminar</i> , 2001 (pages 1-10)	

Examiner Signature		Date Considered	
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